UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,033	08/04/2003	Chien-Meen Hwang	95-538	4695

20736 7590 06/22/2007	EXAMINER
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ART UNIT	PAPER NUMBER
2611	

MAIL DATE	DELIVERY MODE
06/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

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Advisory Action *Before the Filing of an Appeal Brief*	Application No. 10/633,033	Applicant(s) HWANG ET AL.	
	Examiner Ted M. Wang	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED <u>05 June 2007</u> FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

   a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.

   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

<u>NOTICE OF APPEAL</u>

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

<u>AMENDMENTS</u>

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will <u>not</u> be entered because

   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ They raise the issue of new matter (see NOTE below);

   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____.

   Claim(s) objected to: _____.

   Claim(s) rejected: *1, 4, 5, 8*.

   Claim(s) withdrawn from consideration: _____.

<u>AFFIDAVIT OR OTHER EVIDENCE</u>

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will <u>not</u> be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will <u>not</u> be entered because the affidavit or other evidence failed to overcome <u>all</u> rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

<u>REQUEST FOR RECONSIDERATION/OTHER</u>

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: <u>see continuation sheet.</u>

12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____

13. ☐ Other: _____.

U.S. Patent and Trademark Office
PTOL-303 (Rev. 08-06)   Advisory Action Before the Filing of an Appeal Brief   Part of Paper No. 20070618

<div align="center">**Continuation Sheet (PTOL-303)**</div>

<div align="center">***Response to Arguments***</div>

1.   Applicant's arguments, filed on 06/05/2007, with respect to claims 1, 4, 5 and 8 have been fully considered but they are not persuasive. The Examiner has thoroughly reviewed Applicants' arguments but firmly believes that the cited reference to reasonably and properly meet the claimed limitations.

Independent Claims 1 and 5

(1) *Applicants' argument* – "The Examiner contends that Carsello teaches a DC notch filter to remove DC distortion, "such that the filtered first and second components having (sic) equal power distribution". Carsello, <u>however does not teach or suggest that the filtered first and second components have (sic) equal power distribution. Applicant requests the Examiner to indicate by column and line number where Carsello teaches this claimed feature</u>. Otherwise the rejection is legally deficient because it fails to establish that the prior art teaches the claimed elements, as asserted." as recited.

Examiner's response – The response with respect to the limitation of "<u>the filtered first and second components have equal power distribution</u>" has been addressed in the pages 3-5 of the previous Final Office action, dated 4/18/2007. That is, the limitation of "<u>the filtered first and second components have equal power distribution</u>" is <u>due to the filtering of the pilot carrier and the DC components as described in the page 8, lines 7-8, of the instant application</u>. The modified circuit

of the AAPA, Fig.1 and Carsello teaches a DC notch filter (Fig.3 element 310) to

remove DC distortion (column 4 lines 29-30, Carsello reference) and a low pass

filter to filter a pilot carrier from each of the first and second components (Fig.1

elements 20a and 20b, Fig.1 of AAPA, where it is inherent that the pilot carrier

can be removed by the low pass filter, 20a and 20b, as admitted by the instant

application, page 7, line 33-34, "Note that the pilot notch filter 100 also can be

implemented as a low pass filter" as recited.) to obtain filtered first and second

components (Fig.1 elements 20a and 20b outputs (I and Q), respectively.

(2) *Applicants' argument* – "In fact, Carsello <u>requires DC energy to be present in his</u>

~. See column 4, lines 52-57 of Carsello where it is taught that the DC term 406

accounts for about 15% of the pilot signal energy and is a critical element of the

PAS-QAM signal. Carsello further teaches that simulations which notch out this

DC term "have shown unacceptable receiver sensitivity..." Thus, Carsello

teaches away from notching out DC energy and if the notch filters of Carsello

were employed in the AAPA, DC energy would be present, but distortion thereof

would be filtered." as recited

Examiner's response – The modified circuit of the AAPA as addressed in the last

Final Office action (APAA in view of Carsello) that teaches a DC notch filter

(Fig.3 element 310, Carsello's reference) connected to a low pass filter to filter a

pilot carrier from each of the first and second components (Fig.1 elements 20a

and 20b, Fig.1 of AAPA) has the same circuit structure, Fig.3, as that of the

instant application. It is inherent that the modified circuit of the AAPA will perform the same function as that of the instant application.

Thus, for the explanation addressed in the above paragraph, the rejection with APAA in view of Carsello's reference is adequate.
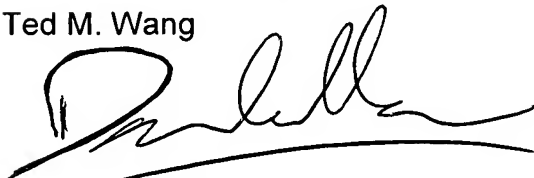
Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted M. Wang whose telephone number is 571-272-3053. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ted M Wang
Examiner
Art Unit 2611

Ted M. Wang

DACHA
PRIMARY EXAMINER